UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,671	06/21/2006	Susumu Morioka	09812.0143	3699

22852 7590 06/21/2007

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER	
NGUYEN, HOANG V	

ART UNIT	PAPER NUMBER
2821	

MAIL DATE	DELIVERY MODE
06/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,671	Applicant(s) MORIOKA ET AL.	
	Examiner Hoang V. Nguyen	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *7* is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *9/19/05* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/21/06; 9/19/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asbrink (US 5,883,574) in view of JP 56-27509 (hereinafter JP'509).

Regarding claim 1, Asbrink (Figure 1) discloses an antenna device comprising a looped conductor portion comprised of a looped conductive wire 1; and a shield member 3 which as a whole covers the looped conductor portion; wherein a first line (not numbered) for connecting one end of the conductive wire 1 to ground and a second line 8 for connecting the shield member to ground are physically and individually provided. Asbrink fails to teach a non-covered portion where the shield member does not cover the looped conductor portion, the non-covered portion corresponding to a portion of the conductive wire including a reference position concerning the symmetry of two terminals for connection between the antenna device and a reception circuit. JP'509 discloses an antenna device comprising a looped conductor portion comprised of a looped conductive wire 1; a shield member 2 which as a whole covers the looped conductor portion; and a non-covered portion A where the shield member does not cover the looped conductor portion, the non-covered portion corresponding to a portion of the conductive wire including a reference position concerning the symmetry of two terminals for connection between the antenna device and a reception circuit. It would have been obvious to one of ordinary skill in

the art at the time the invention was made to employ the Asbrink antenna device with a non-covered portion where the shield member does not cover the looped conductor portion, the non-covered portion corresponding to a portion of the conductive wire including a reference position concerning the symmetry of two terminals for connection between the antenna device and a reception circuit, as taught by JP'509, doing so would yield a balanced shield structure thus achieving improved antenna performance.

Regarding claim 2, as applied to claim 1, Asbrink (Figure 1) shows a feeder cable 5 for connecting the conductive wire 1 in the looped conductor portion to the reception circuit side, wherein the feeder cable comprises a predetermined number of core wires including at least a core wire serving as the first line, and a covered wire provided so as to cover the core wires and connected between the shield member and ground.

Regarding claim 3, as applied to claim 1, JP'509 (Figure 1) shows the shield member 2 is a pipe member having an outside shape corresponding to the loop shape of the looped conductor portion, a conductive member 1 of the looped conductor portion is contained in the inside of the pipe member, and the non-covered portion A is formed as a portion where the conductive member of the looped conductor portion is not covered by the pipe member.

Regarding claim 4, as applied to claim 1, JP'509 (Figure 1) shows one shield wire including at least one core wire 1 as a conductive member of the looped conductor portion and a covered wire 2 as the shield member provided so as to cover the core wire, wherein the non-covered portion A is formed as a portion where the core wire is not covered by the covered wire in the shield wire.

Regarding claim 5, as applied to claim 1, JP'509 (Figure 1) shows that the shield member 2 is a conductive foil member provided so as to cover the periphery of the looped conductor portion, and the non-covered portion A is formed as a portion where the core wire 1 is not covered by the conductive foil member.

Regarding claim 6, as applied to claim 5, Asbrink (Figure 1) further shows a spool member around which a conductor wire 1 of the looped conductor portion covered by the conductive foil member is wound in a loop shape.

Allowable Subject Matter

3. Claim 7 is allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art of record, either taken alone or in combination, fairly teaches or suggests a method of manufacturing an antenna device comprising at least the steps of arranging a conductive foil member as a shield member for shielding a looped conductor portion, relative to a spool portion placed along a loop shape of the looped conductor portion in a spool member, the conductive foil member being not arranged at a position corresponding to a portion of the looped conductor portion including a reference position concerning the symmetry of connection portions for connecting both end portions of the looped conductor portion to the reception circuit side; winding a conductive wire as the looped conductor portion around the spool portion from the upper side of the conductive foil member arranged by the arranging step; and covering the conductive wire with the conductive foil member so that the conductive wire wound by the winding step is covered with the conductive foil member.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4,278,980 discloses an antenna circuit for a radio receiver.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V. Nguyen whose telephone number is (571) 272-1825. The examiner can normally be reached on Mondays-Fridays from 8:00 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hvn
6/14/07

HOANG V. NGUYEN
PRIMARY EXAMINER